



Dart Aerospace Ltd.
1270 Aberdeen St
Hawkesbury, ON
K6A 1K7
Canada

Tel (613) 632-5200
Fax 613 632-5246

D119-646-241
Job Sheet 198188



Part No: D119-646-241

Job Qty: 1 pcs

Part Name: AW119 Replacement Skidtube with Heavy Duty Wearplates - Fits LH or RH



Part Weight: 0 lbs

Status: New

Priority: Medium

Job Created: 7/23/19

Job Tracking No:

Created By: Marie Lajeunesse

Due Date: 12/2/19

Description:

Note: DWG IIN-D119-646 REV D, D3887-045 REV E SHEETS 4, 6-11 IPP RevA: New issue DD verified by:EC IPP REV B 12.11.05 (DEOD3887-B-1)(ecn 12-675) DD verf:JLM IPP REV:C 13.03.20 per chg003 ECN13-534 DD verf:JLM IPP REV:D 17.05.19 as per dwg D3887 rev.e DD verf:JFS

Ship Via:

Bill of Materials

Job Routing

Op No	Operation	Qty	Start Date	Due Date	Standard Setup Hrs	Run Hrs	Workcenter/Supplier		Sign-off
							Workcenter / Supplier	Lead Time	
110	Skidtubes - 1	1 pcs	12/2/19		0.00	0.05	Skidtubes - 1		00
							Skidtubes - 2		
							Skidtubes - 3		
							Skidtubes - 4		
							Skidtubes - 5		
							Skidtubes - 6		
							Skidtubes - 7		
120	Handfinish - 1-1 Chemical-B4B	1 pcs	12/2/19		0.00	0.79	Handfinish - 1 - 1 - B4B		JUL 31 2019
							Handfinish - 1 - 2 - B4B		
							Handfinish - 1 - 3 - B4B		
							Handfinish - 1 - 4 - B4B		
							Handfinish - 1 - 5 - B4B		
							Handfinish - 1 - 6 - B4B		
							Handfinish - 1 - 7 - B4B		
							Handfinish - 1 - 8 - B4B		
							Handfinish - 1 - 9 - B4B		
							Handfinish - 1 - 10 - B4B		
							Handfinish - 1 - 11 - B4B		
							Handfinish - 1 - 12 - B4B		
							Handfinish - 1 - 13 - B4B		
							Handfinish - 1 - 14 - B4B		
							Handfinish - 1 - 15 - B4B		
							Handfinish - 1 - 16 - B4B		
							Handfinish - 1 - 17 -		



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CANADA
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Container No: S201695



Part: D119-646-241

Job No: 198188

Serial No/Batch: S201695

Revision:

Inspector:

Exp Date:

Instructions: FAA STC SR02024SE 18/10/17, EC STC LoA P...

Plex 7/23/19 1:41 PM Dart.lajeunesse

				B4B	
				Handfinish - 1 - 18 - B4B	
				Handfinish - 1 - 19 - B4B	
				Handfinish - 1 - 20 - B4B	
				Handfinish - 1 - 21 - B4B	
				Handfinish - 1 - 22 - B4B	
121 QC 7	1 pcs	12/2/19	0.00 0.00	QC 7 - 10	
				QC 7 - 13	
				QC 7 - 14	
				QC 7 - 15	
				QC 7 - 17	
				QC 7 - 18	BB
				QC 7 - 19	
				QC 7 - 2	
				QC 7 - 28	
				QC 7 - 3	
				QC 7 - 30	
				QC 7 - 34	
				QC 7 - 36	
				QC 7 - 37	
				QC 7 - 41	
				QC 7 - 47	
				QC 7 - 48	
				QC 7 - 51	
				QC 7 - 58	
				QC 7 - 59	
				QC 7 - 60	
				QC 7 - 9	
				QC 7 - 68	
				QC 7 - 50	
				QC 7 - 67	
				QC 7 - 40	
				QC 7 - 24	
				QC 7 - 43	
				QC 7 - 61	
				QC 7 - 81	
125 QC 5	1 pcs	12/2/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	BE
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	

130 Skidtubes - 2 - B4B	1 pcs	12/2/19	0.00 2.38	Skidtubes - 1 - B4B	
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	TF
				Skidtubes - 5 - B4B	
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	
135 QC 5	1 pcs	12/2/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	BB
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
140 Skidtubes - 3 - B4B	1 pcs	12/2/19	0.00 2.38	Skidtubes - 1 - B4B	
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	TF
				Skidtubes - 5 - B4B	
				Skidtubes - 6 - B4B	JW
				Skidtubes - 7 - B4B	
150 QC 5	1 pcs	12/2/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	BB
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
160 Skidtubes - 4 - B4B	1 pcs	12/2/19	0.00 2.44	Skidtubes - 1 - B4B	BB
				Skidtubes - 2 - B4B	
				Skidtubes - 3 - B4B	
				Skidtubes - 4 - B4B	
				Skidtubes - 5 - B4B	BB
				Skidtubes - 6 - B4B	
				Skidtubes - 7 - B4B	

7/23/2019

[Dart Hawkesbury] Job Sheet - Lajeunesse, Marie

170 QC 5	1 pcs	12/2/19	0.00 0.00	QC 5 - 10	
				QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
180 QC 10	1 pcs	12/2/19	0.00 0.00	QC 10 - 10	
				QC 10 - 18	
				QC 10 - 24	
				QC 10 - 43	
				QC 10 - 50	
				QC 10 - 58	
				QC 10 - 9	
190 Handfinish - 2-1 Pressure- B4B	1 pcs	12/2/19	0.00 0.33	Handfinish - 2 - 1 - B4B	
				Handfinish - 2 - 2 - B4B	
				Handfinish - 2 - 3 - B4B	
				Handfinish - 2 - 4 - B4B	
200 Powdercoat - 1 White GI(A)- B4B	1 pcs	12/2/19	0.00 0.20	Powdercoat - 1 - B4B	
				Powdercoat - 2 - B4B	
				Powdercoat - 3 - B4B	
				Powdercoat - 4 - B4B	
210 QC 3	1 pcs	12/2/19	0.00 0.00	QC 3 - 10	
				QC 3 - 13	
				QC 3 - 15	
				QC 3 - 17	
				QC 3 - 18	
				QC 3 - 2	
				QC 3 - 28	
				QC 3 - 3	
				QC 3 - 30	
				QC 3 - 34	
				QC 3 - 36	
				QC 3 - 41	
				QC 3 - 51	
				QC 3 - 58	
				QC 3 - 59	
				QC 3 - 68	
				QC 3 - 9	
				QC 3 - 40	
				QC 3 - 19	
				QC 3 - 43	
				QC 3 - 24	
				QC 3 - 61	
				QC 3 - 81	
240 Handfinish - 4-1-Assembly- B4B	1 pcs	12/2/19	0.00 0.79	Handfinish - 4 - 1 - B4B	
				Handfinish - 4 - 10 -	

DAS
AUG 21 2019 68
9-89

DAS
AUG 21 2019 50
9-89

BED 19-08-22

BR 19 9-4

DAS
15
9-89

14 9-5

14 9-03

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				B4B	
				Handfinish - 4 - 11 - B4B	
				Handfinish - 4 - 12 - B4B	
				Handfinish - 4 - 13 - B4B	
				Handfinish - 4 - 14 - B4B	
				Handfinish - 4 - 15 - B4B	
				Handfinish - 4 - 2 - B4B	
				Handfinish - 4 - 3 - B4B	
				Handfinish - 4 - 4 - B4B	
				Handfinish - 4 - 5 - B4B	
				Handfinish - 4 - 6 - B4B	
				Handfinish - 4 - 7 - B4B	
				Handfinish - 4 - 8 - B4B	
				Handfinish - 4 - 9 - B4B	
250 QC 5	1	12/2/19	0.00 0.00	QC 5 - 10	
	pcs			QC 5 - 12	
				QC 5 - 17	
				QC 5 - 18	
				QC 5 - 19	
				QC 5 - 22	
				QC 5 - 24	
				QC 5 - 3	
				QC 5 - 43	
				QC 5 - 49	
				QC 5 - 51	
				QC 5 - 58	
				QC 5 - 68	
				QC 5 - 9	
				QC 5 - 50	
				QC 5 - 30	
				QC 5 - 40	
				QC 5 - 61	
				QC 5 - 81	
260 Packaging 3-1 - Stock - B4B	1	12/2/19	0.00 0.00	Packaging 3 - 1 - B4B	
	pcs			Packaging 3 - 2 - B4B	
				Packaging 3 - 3 - B4B	
				Packaging 3 - 4 - B4B	
				Packaging 3 - 5 - B4B	
				Packaging 3 - 6 - B4B	
				Packaging 3 - 7 - B4B	
				Packaging 3 - 8 - B4B	
				Packaging 3 - 9 - B4B	
				Packaging 3 - 10 - B4B	
				Packaging 3 - 11 - B4B	
				Packaging 3 - 12 - B4B	
				Packaging 3 - 13 - B4B	
				Packaging 3 - 14 - B4B	
				Packaging 3 - 15 - B4B	
				Packaging 3 - 16 - B4B	
				Packaging 3 - 17 - B4B	
				Packaging 3 - 18 - B4B	
				Packaging 3 - 19 - B4B	
				Packaging 3 - 20 - B4B	
				Packaging 3 - 21 - B4B	
				Packaging 3 - 22 - B4B	

SEP 06 2019

DAG
40
8-88

				Packaging 3 - 23 - B4B	
				Packaging 3 - 24 - B4B	
				Packaging 3 - 25 - B4B	
				Packaging 3 - 26 - B4B	
				Packaging 3 - 27 - B4B	
				Packaging 3 - 28 - B4B	
				Packaging 3 - 29 - B4B	
				Packaging 3 - 30 - B4B	
				Packaging 3 - 31 - B4B	
				Packaging 3 - 32 - B4B	
				Packaging 3 - 33 - B4B	
				Packaging 3 - 34 - B4B	
				Packaging 3 - 35 - B4B	
				Packaging 3 - 36 - B4B	
265 DC - 1 - B4B	1 pcs	12/2/19	0.00 0.00	DC - 1 - B4B	
				DC - 2 - B4B	SEP 24 2019
270 QC 21 - FG	1 pcs	12/2/19	0.00 0.00	QC 21 - FG - 21	
				QC 21 - FG - 70	SEP 24 2019
				QC 21 - FG - 53	

Part Op 110 - 1- inspect Mat'L D2500-1-190 for damage 2-Cut tube to length as per dwg D3887 (154.8") 3- Ensure squareness of Descriptions: ends and scribe batch#

120 - (Chemical Conversion Coat per QSI005 4.1)

121 - (QC7-Inspect Chemical Conversion Coat)

125 - (QC5- Inspect part completeness to step on W/O)

130 - 1- Install drill Jig DT9477 drill X-bolt spacer pilot holes using 3/16" drill first side only. 2- 2nd side, locating from first saddle holes use DT9861 A/B to drill 2nd side fwd saddle holes. 3- 2nd side locating from fwd saddle drill remaining crossbolt spacer holes using DT9477 4- Open crossbolt spacer holes to finished size as per dwg D3887 (section D-D and E-E) ***DO NOT OPEN FWD Saddles Holes*** 5- Deburr, blow out chips from inside of tube. 6- Bond web in place as per Dwg D3887 & QSI 015. A/R Sikaflex-291 5174342 Sikaflex expire date: 12.08.2019 Start: Aug 7, 2019 Time: _____ Finish: Aug 7, 2019 Time: _____ ***** (Adhere for 12 hours) *****

135 - (QC5- Inspect part completeness to step on W/O)

140 - 1- Bend FWD end of tube using bender 1 and bend prog. D3887. ***Must use bending aid DT9544, ensure proper positioning*** 2- Cut FWD end of tube as per dwg D3887. ***Verify measurement*** 3- Buff out marks left from bending 4- Drill FWD cap holes using DT8215. Open FWD & AFT cap holes to 0.208" 5- Open FWD saddle holes to finished size as per dwg D3887 6- Drill FWD x-bolt spacer holes using DT9816 and open to finished size. (verify measurement) 7- Drill Tow ring hole, using DT10047 locate from FWD saddle hole. (verify measurement). Open to finished size. 8- Drill 1.87" and 3.74 holes using DT10045 A&B locate from FWD saddle hole. (verify measurement) as per dwg. 9- C-sink FWD cap hole as per detail "C" 10- Countersink crossbolt spacer holes, and prepare tube for welding, deburr. 11- Deburr and blow out chips from inside of tube.

150 - (QC5- Inspect part completeness to step on W/O)

160 - NOTE: TACK IN 2 MOST FWD X-BOLT SPACERS AND TEST FIT FWD GROUND HANDLING FIXTURE, IF FIXTURE FITS WELL THEN PROCEED. FIXTURE DT10091. 1- Insert crossbolt spacers. Weld as per QSI 004 and Dwg D3887. Remember to back drill each hole before welding the other side. Use aluminum rod A/R Aluminum Rod LS9011 2- Grind cross bolt welds flush as per Dwg D3887. Ensure no pin hole. 3- Counterbore x-bolt spacer holes as per Dwg D3887 using DT10279. 4- Deburr and blow out chips from inside of tube 5- Pick D2855-5 cap and transfer drill missing hole. Deburr and identify cap with skid tube batch#.

170 - (QC5- Inspect part completeness to step on W/O) TEST FIT USING FIXTURE DT10091.

180 - (QC10- Inspect visual per QSI004- ground welds)

190 - (Pressure Wash per QSI005 4.3/ Clean and remove all markings)

200 - (White Gloss (Ref: 4.3.5.1) per QSI005 4.3-Alum) ***MASK AREA SHOWN ON SHEET 7, NOTE 9*** START TIME: _____ OVEN TEMPERATURE: _____ FINISH TIME: _____

210 - (QC3- Inspect Part Finish)

240 - 1- Install wearplates as per Dwg D3887. 2- Inspect for foreign objects as per QSI 024 3- Install D2855-3 Cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 5206122 Sikaflex expire date: 14-12-9 4- Install insert in D2855- Cap. Install cap and seal with Sikaflex. Clean excess adhesive. A/R Sikaflex-240/-291 5206122 Sikaflex expire date: 14-12-9 5- INSPECT TORQUE ON BOLTS AS PER DWG.

BY: _____ DATE: _____ 6- Wing Walk as per dwg QSI005 4.4 Batch: 546104

250 - (QC5- Inspect part completeness to step on W/O)

260 - (Identify as per dwg & Stock Location: _____) Location: FG108

265 - Photocopy bluefile & type labels per PPP D119-646-241 CHG005

270 - (QC21- Final Inspection - Work Order Release)

Job BOM					011776
Part / Item	Component Name	Quantity	Operation	Container	
D2500-1-190	Ext'n - 'I' Beam Tube 4"	1 pcs (1 ea)	110-Skidtubes - 1	5168371	
D2579	Crossbolt Spacer	2 pcs (2 ea)	140-Skidtubes - 3 - B4B	5097840	
D3885-1	Standard Web	1 pcs (1 ea)	140-Skidtubes - 3 - B4B	5170688	
D3681-1	Spacer	12 pcs (12 ea)	160-Skidtubes - 4 - B4B	5146873	
D3903-1	Spacer	12 pcs (12 ea)	160-Skidtubes - 4 - B4B	5144966*7 5184452*5	
ALS4-1032-225	Rivnut	1 Ea (1 ea)	240-Handfinish - 4-1-Assembly-B4B	5174309	
AN3C46A	Bolt	8 Ea (8 ea)	240-Handfinish - 4-1-Assembly-B4B	5176479	
AN3C5A	Bolt	2 Ea (2 ea)	240-Handfinish - 4-1-Assembly-B4B	5207570	
D2855-3	Cap	1 pcs (1 ea)	240-Handfinish - 4-1-Assembly-B4B	5126403	
D2855-5	Cap	1 pcs (1 ea)	240-Handfinish - 4-1-Assembly-B4B	5002078	
D3492-045	Plug Assembly	8 pcs (8 ea)	240-Handfinish - 4-1-Assembly-B4B	5183339	
D3672-1	Washer, Phenolic	2 pcs (2 ea)	240-Handfinish - 4-1-Assembly-B4B	F164008	
D3849-041	Fwd Heavy-Duty Wearplate, Std Skid Compatible	1 pcs (1 ea)	240-Handfinish - 4-1-Assembly-B4B	5035619	
D3849-043	Aft Heavy-Duty Wearplate, Std Skid Compatible	1 pcs (1 ea)	240-Handfinish - 4-1-Assembly-B4B	5074173	
D3904-1	Washer	16 pcs (16 ea)	240-Handfinish - 4-1-Assembly-B4B	5172882	
MS21043-3	Nut	8 Ea (8 ea)	240-Handfinish - 4-1-Assembly-B4B	5099569	
MS24694-C52	Screw	2 Ea (2 ea)	240-Handfinish - 4-1-Assembly-B4B	5067269	
NAS1149C0332R	Washer (AN960C10L)	2 Ea (2 ea)	240-Handfinish - 4-1-Assembly-B4B	5193136	
NAS1611-005 / 5122852 (x8)					
Job Allocations					
Operation	Component Part	Required	Inventory	Allocated	
110-Skidtubes - 1	D2500-1-190	1	73	0	
140-Skidtubes - 3 - B4B	D2579	2	93	0	
	D3885-1	1	20	0	
160-Skidtubes - 4 - B4B	D3681-1	12	84	0	
	D3903-1	12	79	0	
240-Handfinish - 4-1-Assembly-B4B	ALS4-1032-225	1	827	0	
	AN3C46A	8	222	0	
	AN3C5A	2	783	0	
	D2855-3	1	78	0	
	D2855-5	1	41	0	
	D3492-045	8	4	0	
	D3672-1	2	1,587	0	
	D3849-041	1	1	0	
	D3849-043	1	7	0	
	D3904-1	16	72	0	
	MS21043-3	8	906	0	
	MS24694-C52	2	60	0	
	NAS1149C0332R	2	4,347	0	
Part Specifications					
Specifications could not be found.					

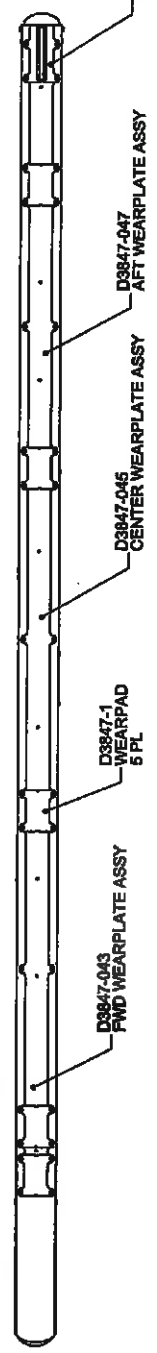
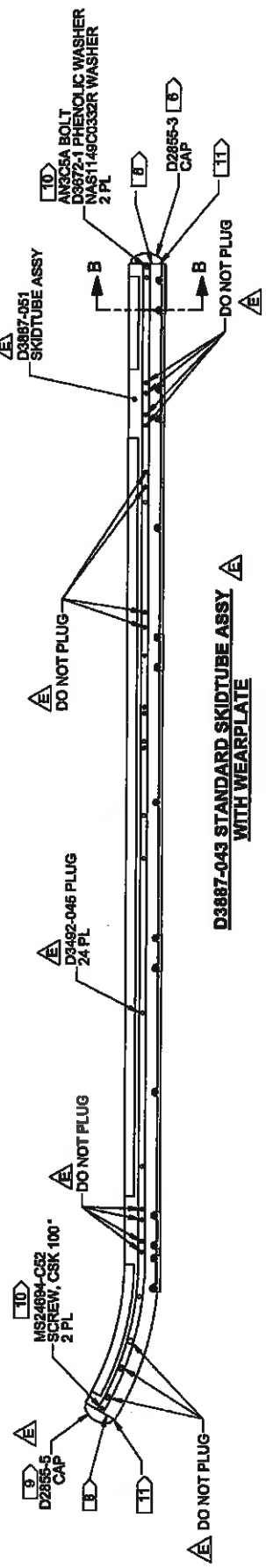
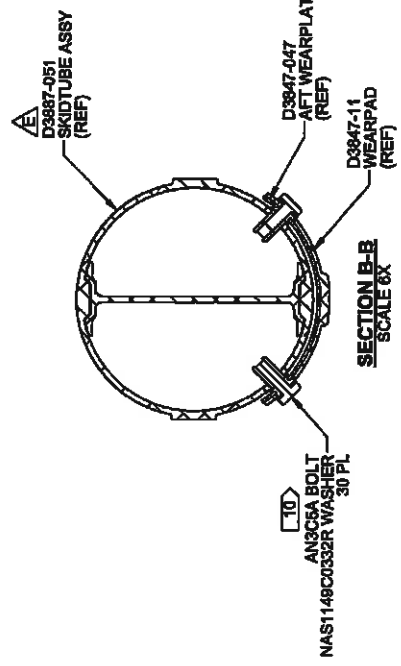
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2017-05-08
EAL 17-519

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ITEM	QTY	P/N	DESCRIPTION
1	X	D3887-043	STANDARD SKIDTUBE ASSY WITH WEARPLATE
2	1	D2865-3	CAP ASSY
3	1	D2865-5	CAP ASSY
4	24	D3482-046	PLUG ASSY
5	2	D3872-1	PHENOLIC WASHER
6	1	D3847-043	FWD WEARPLATE ASSY
7	1	D3847-045	CENTER WEARPLATE ASSY
8	1	D3847-047	AFT WEARPLATE ASSY
9	5	D3847-1	WEARPAD
10	1	D3847-11	WEARPAD
11	1	D3887-051	SKIDTUBE ASSY
12	32	AN3CSA	BOLT
13	2	MS24694-C52	SCREW, CSK 100"
14	32	NAS1148C0332R	WASHER



- NOTES:**
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 01.8 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 1/16" WITH DART P/N "D3887-043" AND BATCH NUMBER PER QSI 044 6.4
 - 6) IDENTIFICATION: ON THE ID OF THE TUBE, BEFORE INSTALLING THE AFT D2865-3 CAP
 - 7) WEIGHT: 37.0 lbs
 - 8) RELIEVE INNER RIDGE OF EXTRUSION, AS NEEDED, TO ALLOW FOR INSTALLATION OF D2865-3 AND D2865-5 CAP ASSY, ALODINE BARE MATERIAL
 - 9) USE D3887-051 SKIDTUBE ASSY TO LOCATE AND BACKDRILL UNDRILLED INSERT HOLE INTO D2865-5 CAP. OPEN HOLE TO Ø0.287, ALODINE BARE MATERIAL, AND INSTALL AL84-1032-225 (OR AK57-1032-225, OR AK54-1032-225) INSERT ON INSIDE OF CAP.
 - 10) SEAL FASTENERS WITH SIKAFLEX -241/281 OR PROSEAL 880 OR MIL-S-8802 CLASS B2 SEALANT
 - 11) SEAL MATING SURFACES WITH SIKAFLEX -241/281 OR PROSEAL 880 OR MIL-S-8802 CLASS B2 SEALANT

RELEASED
2017-05-08

DESIGN	RF	WVK	RF	WVK	RF	WVK	RF	WVK
DRAWN			CHECKED		RF		DD	
APPROVED			APPROVED		HS		DE APPR	
DATE	17.02.03		TITLE					

DART AEROSPACE USA, INC.
EUGENE, OR

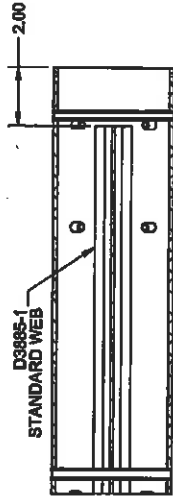
D3887

A119 STD SKIDTUBE ASSY

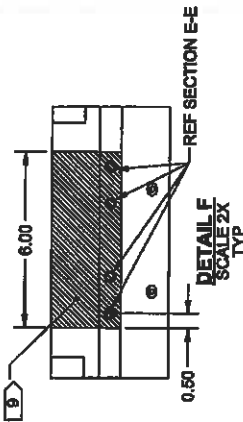
DATE 17.02.03

REV. E
SHEET 3 OF 11
SCALE
NTS

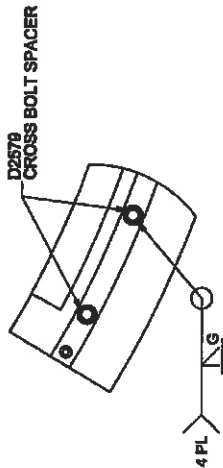
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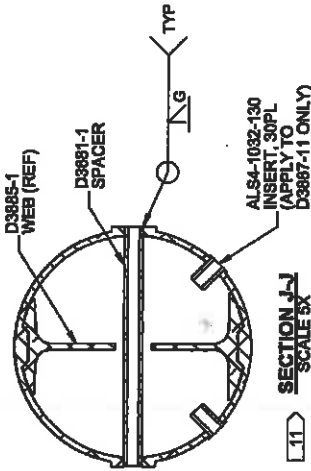
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SCALE 2X
TYP



DETAIL F
SCALE 2X
TYP

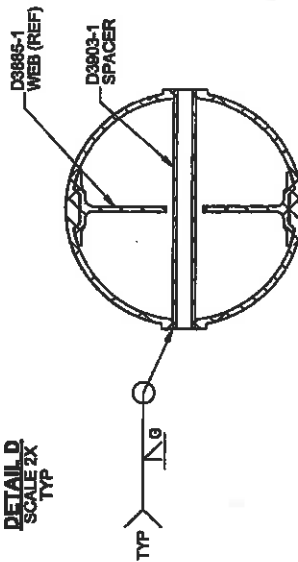


DETAIL D
SCALE 2X
TYP



SECTION J-J
SCALE 5X
TYP

(FOR 12X $\phi 0.313$ HOLES
PER SKIDTUBE)



SECTION E-E
SCALE 5X
TYP

(FOR 12X $\phi 0.375$ HOLES
PER SKIDTUBE)

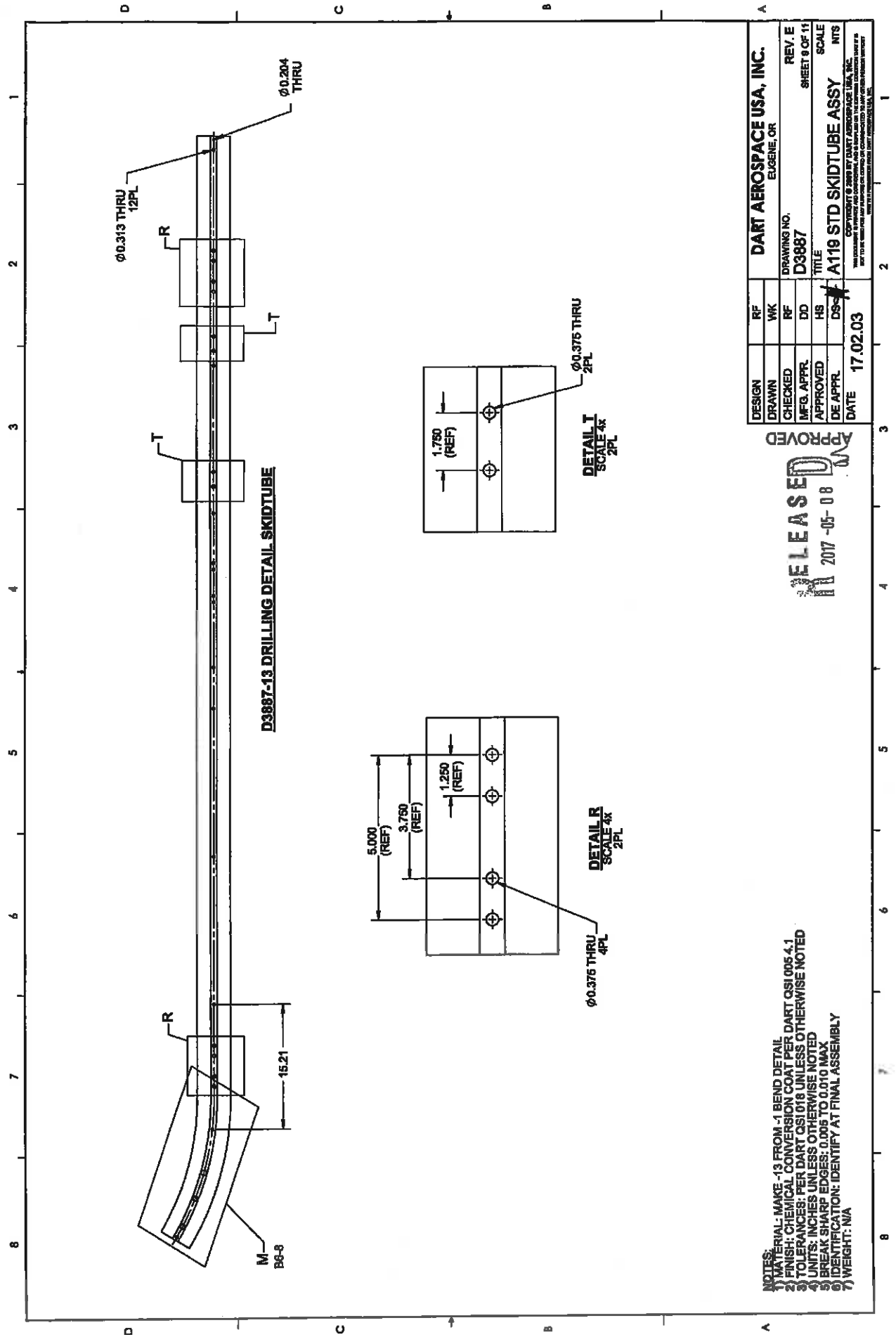
- NOTES:
- 1) MATERIAL: N/A
 - 2) FINISH: NONE
 - 3) TOLERANCES: PER DART QSI 016 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
 - 7) WEIGHT: N/A
 - 8) INSERT D3885-1 WEB TO LOCATION SHOWN OFF AFT END OF SKIDTUBE AND BOND WEB INTO OUTER TUBE WITH SIKAFLEX-241/281 ADHESIVE PER DART QSI 015 AFTER BENDING. ENSURE HOLES LINE-UP
 - 9) MASK THIS AREA AND DO NOT POWDER COAT
 - 10) AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR THE SECTION E-E $\phi 0.375$ HOLES ONLY:
 - i) CHAMFER HOLES $\phi 0.475 \times 45^\circ$
 - ii) INSERT D3803-1 SPACER
 - iii) WELD INTO PLACE AND GRIND FLUSH
 - iv) C/BORE TO $\phi 0.313 \times 0.75$ DEEP
 - v) DEBURR HOLES
 - 11) AFTER DRILLING AND BENDING ASSEMBLY, PERFORM THE FOLLOWING FOR THE SECTION J-J $\phi 0.313$ HOLES ONLY:
 - i) CHAMFER HOLES $\phi 0.354 \times 45^\circ$ OR 0.050 DEEP $\times 45^\circ$ (BOTH SIDES)
 - ii) INSERT D3881-1 SPACER
 - iii) WELD INTO PLACE AND GRIND FLUSH
 - iv) DEBURR HOLES
 - 12) WELD PER DART QSI 004

DESIGN	RF	WK	DATE	17.02.03
DRAWN				
CHECKED				
MFG. APPR.				
APPROVED				
DE APPR.				

RELEASED
N 2017-05-08

DRAWING NO.		REV. E	SHEET 7 OF 11
D3887			
DART AEROSPACE USA, INC.		19 STD SKIDTUBE ASSY	
EUGENE, OR		SCALE NTS	

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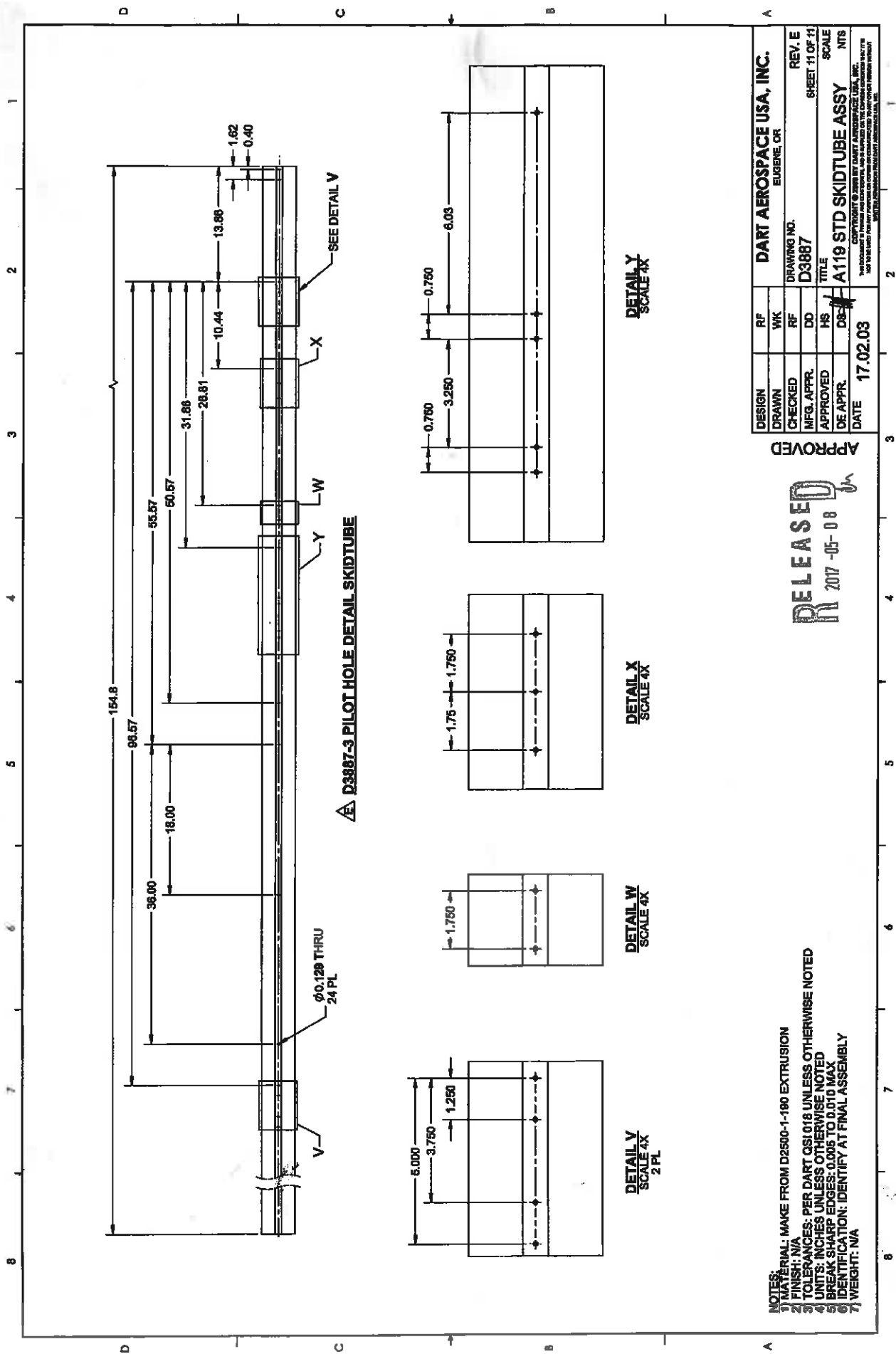


NOTES:
 1) MATERIAL: MAKE -13 FROM -1 BEND DETAIL
 2) FINISH: CHEMICAL CONVERSION COAT PER DART QSI 005 4.1
 3) TOLERANCES: PER DART QSI 018 UNLESS OTHERWISE NOTED
 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
 7) WEIGHT: N/A

DESIGN	RF	WK	DRAWING NO.	REV. E
CHECKED	RF	RF	D3887	SHEET 9 OF 11
DE APPR.	DD	DD	TITLE	SCALE
DATE	17.02.03	17.02.03	A119 STD SKIDTUBE ASSY	NTS

DART AEROSPACE USA, INC.
 EUGENE, OR

RELEASED
 2017-05-08
 APPROVED



D3887-3 PILOT HOLE DETAIL SKIDTUBE

DESIGN	RF	RF	DART AEROSPACE USA, INC.
DRAWN	WK	WK	EUGENE, OR
CHECKED	RF	RF	DRAWING NO. D3887
MFG. APPR.	DD	DD	REV. E
APPROVED	HS	HS	SHEET 11 OF 11
DE APPR.	DS	DS	TITLE A119 STD SKIDTUBE ASSY
DATE	17.02.03	17.02.03	SCALE NTS

RELEASED
N 2017-05-08

- NOTES:
- 1) MATERIAL: MAKE FROM D2500-1-180 EXTRUSION
 - 2) FINISH: N/A
 - 3) TOLERANCES: PER DART QS/018 UNLESS OTHERWISE NOTED
 - 4) UNITS: INCHES UNLESS OTHERWISE NOTED
 - 5) BREAK SHARP EDGES: 0.005 TO 0.010 MAX
 - 6) IDENTIFICATION: IDENTIFY AT FINAL ASSEMBLY
 - 7) WEIGHT: N/A

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Entered: _____ Date: _____

WORK ORDER NON-CONFORMANCE / ROUTE UPDATE

Route update only

NCR No. _____

Job: _____

Part No. _____

DISPOSITION

Rework ☐
Scrap ☐
Use-as-is ☐

DEPARTMENT/PROCESS

Skid-tube ☐ Eng. (Non-AW) ☐
Machining ☐ Prod. Eng. Coord. ☐
Large Fab ☐ Rec/Store/Packaging ☐
Cross tube ☐
Small Fab ☐
Finishing ☐

Engineering ☐
Water Jet ☐
Supplier ☐
Quality ☐

Date: _____ Sequence #: _____

QTY Affected: _____

MRB (QS1042)

Description Work Order Deviation

Disposition

Completed By _____

Lead hand / Supervisor _____

QC / QA Coordinator _____

Root Cause

Operator ☐
Manufacturing Process ☐
Equip/Tooling ☐
Handling/Preservation ☐
Material ☐
Product Improvement ☐
Process Improvement ☐
Human Factors ☐

Pressure/Forced ☐
Bending ☐
Crushing ☐
Cracks ☐
Crimp/kink/Ripple/Wave/Twist ☐
Marks/Chatter ☐
Mislabeled ☐

Contamination ☐
Misaligned/off center ☐
BOM/Route ☐
Broken/Damage/Defect ☐
Incomplete/Unclear Instructions ☐
Drill Holes ☐
Fit/Function ☐

Power Loss/Surge ☐
Folio/Program ☐
Grain Direction ☐
Weld ☐
Wrong Stock Pulled ☐
Out of Sequence ☐
Off-set/Set-up ☐

Positioned Wrong ☐
Outside Tolerance ☐
Drawing ☐
Finish ☐
Part Lost/Missing ☐
Misread ☐

Other/Details: _____

Change Record

PAGE 1 OF 1

Part Number: D119-646-241

Description: REPLACEMENT STD SKIDTUBE w/ TRAINING WEARPLATES

[illegible]